CLAIMS

1. A composite gear wherein an external gear and a rotation support surface are formed on an outer peripheral surface thereof and a first internal gear and a second internal gear are formed on an inner peripheral surface thereof at a predetermined interval in the rotating axis direction, wherein:

a chuck portion is formed on the inner peripheral surface between the first internal gear and the second internal gear, and

an inner diameter of the chuck portion is smaller than at least one of a diameter of the tip of the first internal gear and a diameter of the tip of the second internal gear.

2. A composite gear as claimed in claim 1, wherein the inner diameter of the chuck portion is smaller than the diameter of the tip of the first internal gear and larger than the diameter of the bottom of the second internal gear.

3. A method of manufacturing the composite gear as claimed in claim 1, comprising:

processing the inner peripheral surface to form the chuck portion, the first internal gear, and the second internal gear on the inner peripheral surface such that the chuck portion is located between the first internal gear and the second internal gear in the rotating axis direction and the inner diameter of the chuck portion is smaller than at least one of the diameter of the tip of the first internal gear and the diameter of the tip of the second internal gear,

processing the external gear with the chuck portion being

chucked, and

processing a rotation support surface with the chuck portion being chucked.

4. The method of manufacturing the composite gear as claimed in claim 3, wherein the processing the inner peripheral surface is a process in which the chuck portion, the first internal gear, and the second internal gear are formed on the inner peripheral surface such that the inner diameter of the chuck portion is smaller than the diameter of the tip of the first internal gear and larger than the diameter of the bottom of the second internal gear.